

COLLECTING HELIOTHINAE (LEPIDOPTERA)
ALONG THE SOUTH CAROLINA SEA-
BOARD AND ADJOINING
AREAS.

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Although there are a number of records of Heliothinae (Barnes and McDunnough List Nos. 1052-1218) from the southeastern United States, a check of all the material in this group at the U. S. National Museum about a year ago showed only three species from South Carolina. These were *Heliothis obsoleta* Fabr., *Lygranthoecia siren* Streck. and *Schinia trifascia* Hübn.

A few notes are presented here and a list of seventeen species of Heliothinae taken in the course of a two week trip in the South in search of them during mid-September, 1937, in company with Mr. George P. Engelhardt. Included in the list are fifteen species found in South Carolina, among them *Eupanychis scissoides* Benj. Of this species, Mr. J. F. Gates Clarke states that the National Museum Collection has only the male type and the female paratype, which were collected in Florida.

Throughout the trip the weather was generally clear with the exception of a rainy morning in Charleston, S. C. The days were warm and usually sunny, the nights mild. Toward the end of September, however, a few of them were quite cool.

At Southern Pines, North Carolina, the first stop for collecting, no moths appeared during the evening at the exterior lights on buildings. The next morning under a warm sun, collecting in open meadows turned up *Heliothis paradoxa* Grt., *Schinia trifascia* Hübn., *S. lynx* Guen., and *S. sordida* Sm. These were usually found sitting in the heads of field flowers or, when startled, in flights of ten to twenty yards at the high speed characteristic of these moths. Only *sordida* Sm. was present in any quantity and the poor condition of most of the material taken suggested that the season for them at Southern Pines was well advanced.

Crossing into South Carolina, we made an overnight stop at Pocalla Springs near Sumter. Several *sordida* were captured at lights together with a specimen each of *Lygranthoecia tuberculum* Hübn. and *Schinia saturata* Grt. The notable feature, however, was the large numbers of *Lygranthoecia ultima* Streck. Although there were many electric lights on the buildings and along the walks at Pocalla Springs and a powerful neon sign at the highway, practically all these moths clustered around three or four adjacent building lights. To the human eye these lights appeared no different in

character and location from many other lights in the vicinity, all of which were bare of moths. In the morning a careful examination of the surrounding sunny and flower covered fields did not disclose a single specimen of *ultima*, which had been so abundant at lights the previous evening.

Outside of Savannah, Georgia, conditions appeared favorable but collecting was poor, somewhat better results being obtained further south among the sand dunes at Sea Island Beach on St. Simon Island off Brunswick, Georgia, where daylight collecting added one *Lygranthoecia siren* Streck. to our list. Returning to South Carolina, daylight collecting at Beaufort included *Schinia sanguinea* Geyer. in the catch. Further collecting among the pines along the road north of Georgetown netted *Heliothis virescens* Fabr. and *Lygranthoecia bimatrix* Harv.

The high point of the trip was reached at Myrtle Beach, a stretch of pine barrens on the South Carolina coast, which yielded fourteen species of Heliothinae in one night and a morning. Most of these were found at lights on a building located in a partly cleared pine section about a half mile back from the ocean. Not far from it was a small stream. Except for *S. trifascia* Hübn. which seemed equally common both at lights, and on yellow aster by day, the representation in each of the various species present was small. It was at Myrtle Beach that *Eupanychis scissoides* Benj. occurred. Curiously enough, *S. sordida* Sm., which was found at practically every other spot where we collected, did not appear at Myrtle Beach.

Following these results, a final stop was made outside New Bern, North Carolina, on the way north. Here a large gasoline light was set up, shining on a white sheet. In the course of several hours the only thing collected was the dew. No insect of any kind appeared. There was a full moon but it did not rise until late and Heliothinae usually come to lights within an hour after dark. The complete lack of results here was probably due to the low temperature that evening.

In the list the numbers preceding the different species are those in the Barnes and McDunnough Check List. The relative frequency of the different species is indicated by the numbers after the respective localities, showing how many specimens were actually captured.

- 1087 *Heliothis paradoxa* Grt. North Carolina—Southern Pines (3).
1090 *Heliothis obsoleta* Fabr. South Carolina—Myrtle Beach (1).
Georgia—Sea Island Beach (1).

- 1091 *Heliothis virescens* Fabr. South Carolina—Myrtle Beach (1); Georgetown (3).
- 1110 *Lygranthoezia bimatrix* Harv. South Carolina—Myrtle Beach (2); Georgetown (1).
- 1111 *Lygranthoezia carolinensis* B. & McD. South Carolina—Myrtle Beach (1).
- 1112 *Lygranthoezia concinna* Sm. South Carolina—Myrtle Beach (1).
- 1118 *Lygranthoezia siren* Streck. Georgia—Sea Island Beach (1).
- 1119 *Lygranthoezia tuberculum* Hübn. South Carolina—Myrtle Beach (1); Pocalla Springs (Sumter) (1).
- 1128 *Lygranthoezia ultima* Streck. South Carolina—Myrtle Beach (3); Pocalla Springs (Sumter) (102); Beaufort (1). Georgia—Sea Island Beach (2).
- 1152 *Schinia trifascia* Hübn. North Carolina—Southern Pines (2). South Carolina—Myrtle Beach (47); Georgetown (1); Beaufort (1). Georgia—Savannah (1).
- 1180 *Schinia lynx* Guen. North Carolina—Southern Pines (1). South Carolina—Myrtle Beach (1); Ladies Island (Beaufort) (3).
- 1181 *Schinia sordida* Sm. North Carolina—Southern Pines (49). South Carolina—Pocalla Springs (Sumter) (6); Beaufort (11); Ladies Island (Beaufort) (5); Georgetown (1). Georgia—Savannah (1); Sea Island Beach (1).
- 1182 *Schinia petulans* Hy. Edw. South Carolina—Myrtle Beach (5).
- 1187 *Schinia gloriosa* Streck. South Carolina—Myrtle Beach (1).
- 1188 *Schinia sanguinea* Geyer. South Carolina—Myrtle Beach (1); Beaufort (1).
- 1189 *Schinia saturata* Grt. South Carolina—Myrtle Beach (3); Pocalla Springs (Sumter) (1); Beaufort (3). Georgia—Sea Island Beach (1).
- *Eupanychis scissoides* Benj. South Carolina—Myrtle Beach (2).